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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,063	07/17/2003	Stephen Francis Rutkowski	126762	2282

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EXAMINER
KOCH, GEORGE R

ART UNIT	PAPER NUMBER
1734	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/622,063	RUTKOWSKI ET AL.	
	Examiner	Art Unit	
	George R. Koch III	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,11,12 and 17-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,11 and 24* is/are rejected.

7)☒ Claim(s) *2,4-6,12,17-23 and 25-26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-3, 11, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida (US 5,932,012) in view of Barrey (US 6,197,115) and either of the identical Chikahisa (US 6,562,406) or Chikahisa (WO99/49987)

Ishida discloses a robotic pen (see Figure 1) comprising a machine including a stage (items 5, 6 and 8) for mounting a workpiece for rotation and orthogonal translation (described in column 5, lines 3-55), and an elevator (items 4a and 10) for translation from said stage; a pen tip (nozzle 1) mounted to said elevator; a dispenser (syringe 2 and nozzle support 12) joined in flow communication with said pen tip for ejecting a stream of material atop said workpiece; and a digital controller (items 14, 16, 17 and 18, and see column 6, line 61 to column 7, line 61) configured for coordinating relative movement of said pen tip and said stage, and dispensing of said stream from said pen tip.

Ishida does not disclose that the pen is rotatably mounted to the elevator, or that the stage permits translation generally in a plane and rotation about an axis generally parallel to the plane.

Barrey discloses that it is known to uses a stage or end effector for permitting translation generally in a plane and rotation about an axis generally parallel to the plane. Barrey discloses that a multi-axis robot structure allows for the application of sealant to a surface that lies in 2 or more dimensional planes with a smooth and consisten motion (see column 2, lines 54-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a robot stages as in Barrey for the X-Y table of Ishida in order to apply coatings such as the sealant of Ishida and Chikahisa to a surface that lies in 2 or more dimensional planes.

Chikahisa (either US patent or the English translation of WO99/49987) discloses a similar syringe and nozzle applying device wherein a member rotating device (item 230) is used to rotate the nozzles for application. Chikahisa discloses that this rotation enable a shift to a position so as not to come in contact with the wiring (i.e., dispensing) pattern (see column 11, lines 40-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a rotary mounting in order to achieve better control over nozzle positioning shifts during dispensing.

As to claim 2, Both Ishida and Chikahisa disclose that the dispenser comprises: a syringe (Ishida, item 2 and Chikahisa, item 2153) for storing said material, and joined in flow communication with said pen tip; and means for pumping (Ishida, described in column 5, lines 56-60, and Chikahisa, item 2154) said syringe to dispense material through said pen tip. The applicant's specification does not provide a specific example of a means for pumping other than it needs to be computer controller actuated, which is disclosed in both Ishida and Chikahisa.

As to claim 3, Ishida discloses that the controller includes a predetermined path for the pen tip thereacross (see column 3, lines 18-33) and a three dimensional geometry of the workpiece (i.e., measurement data). Similarly, Barrey as incorporated discloses a controller for working with 3-dimensional geometries (see column 4, lines 32-60).

As to claim 11, Ishida discloses a robotic pen (Figure 1) comprising: a computer numerically controlled machine (items 14, 16, 17 and 18) including a stage (items 5, 6 and 8) for mounting a workpiece for rotation and orthogonal translation (see column 5, for example), and an elevator(items 4a and 10) for translation from said stage; a pen tip (item 1) mounted to said elevator, and a dispenser (syring 2) joined in flow communication with said pen tip for ejecting a stream of material atop said workpiece.

Ishida does not disclose that the pen is rotatably mounted to the elevator, or that the stage permits translation generally in a plane and rotation about an axis generally parallel to the plane.

Barrey discloses that it is known to uses a stage or end effector for permitting translation generally in a plane and rotation about an axis generally parallel to the plane. Barrey discloses that a multi-axis robot structure allows for the application of sealant to a surface that lies in 2 or more dimensional planes with a smooth and consisten motion (see column 2, lines 54-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a robot stages as in Barrey for

the X-Y table of Ishida in order to apply coatings such as the sealant of Ishida and Chikahisa to a surface that lies in 2 or more dimensional planes.

Chikahisa discloses a similar syringe and nozzle applying device wherein a member rotating device (item 230) is used to rotate the nozzles for application. Chikahisa discloses that this rotation enable a shift to a position so as not to come in contact with the wiring (i.e., dispensing) pattern (see column 11, lines 40-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a rotary mounting in order to achieve better control over nozzle positioning shifts during dispensing.

Claim 24 is rejected on similar grounds as claims 1 and 11 above.

Allowable Subject Matter

3. Claims 4-6, 12, 17-23 and 25-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 6/10/2005 have been fully considered but they are not persuasive. With regard to the new limitations in claims 1 and 11, Barrey discloses a stage that permits translation as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George R. Koch III
Patent Examiner
Art Unit 1734

GRK
2/19/2005